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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,251	08/31/2006	Hans-Dieter Bothe	10191/3983	2737

26646 7590 01/05/2009
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EXAMINER

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

MAIL DATE	DELIVERY MODE
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01/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/554,251	Applicant(s) BOTHE ET AL.	
	Examiner MICHAEL P. NGHIEM	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-24, 26-28 and 30 is/are rejected.
- 7) ☒ Claim(s) 25 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment filed on December 10, 2008 has been considered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 10, 2008 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-24, 26-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucourt (US 2002/0030608).

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Regarding claims 21, 27, and 30, Boucourt discloses a device and method (Fig. 1) for determining at least one calibration parameter (paragraph 0020, lines 5-10) of at least one image sensor (3), comprising:

the at least one image sensor (3), which is configured to monitor a scene of a passenger compartment of a vehicle (hold of aircraft, paragraph 0001, line 2) in which at least a portion of the scene remains static over time (monitoring an aircraft enclosure, paragraph 0001); and

at least one processing unit (processor of computer 4) configured to detect a decalibration of the at least one image sensor in the operation of the at least one image sensor (e.g., detection of geometrical distortion, paragraph 0020, lines 8-9), as a function of image signals (sensed image signals from camera, paragraph 0019) and to, upon detecting the decalibration, at least one of report the decalibration to at least one of a subsequent system and the driver (distortions are displayed to crew via 6's, Fig. 1), and determine the at least one calibration parameter as a function of the image signals (calibration parameters, paragraph 0020, lines 8-10; correction of distortion on the basis of the parameters, paragraph 0020, lines 11-15);

wherein the at least one image sensor derives the image signals at least from at least one invariant pattern in an image coverage range of the at least one image-sensor (an autocalibration of detection on a plane locating pattern is carried out, paragraph 0020, lines 5-7).

Regarding claim 22, Boucourt discloses the at least one invariant pattern is formed by at least one reference object (paragraph 0020, lines 3-4) applied in the scene for

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determining the at least one calibration parameter (paragraph 0020, lines 4-7).

Regarding claim 23, Boucourt discloses the at least one reference object is at least one of an illumination arrangement (paragraph 0020, lines 1-4) and is configured so that it has a high reflectivity (inherent with tracking of object by vision, paragraph 0020, lines 1-5).

Regarding claim 24, Boucourt discloses the at least one reference object includes at least one of a geometrical shape (paragraph 0020, lines 1-2).

Regarding claim 26, Boucourt discloses the at least one invariant pattern is formed by at least one naturally occurring object of the scene, wherein the at least one invariant pattern is formed by at least one object located in a design-conditioned manner in the passenger compartment of a vehicle (paragraph 0020, lines 1-7).

Regarding claim 28, Boucourt discloses the image signals are at least one of derived from at least one reference object applied in the scene (paragraph 0020, lines 1-7) for the determination of at least one calibration parameter (paragraph 0020, lines 8-10), and derived at least from at least one naturally occurring object of the scene (an autocalibration of detection on a plane locating pattern is carried out, paragraph 0020, lines 5-7), the at least one reference object at least one of being an illuminating arrangement and having a high reflectivity (inherent with tracking of object by vision,

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paragraph 0020, lines 1-5).

Regarding claim 30, Boucourt further discloses a computer readable medium having a computer program (computer medium in 4) which is executable by a computer processor (processor of 4).

However, Boucourt does not disclose:

- regarding claims 21, 26, 27, and 30, monitoring the compartment of a motor vehicle.
- regarding claim 23, the reference object having a high reflectivity between 0.5 and 1.0.

Nevertheless, Boucourt discloses a device for monitoring any enclosure (paragraph 0001, lines 1-2). A motor compartment is shaped as an enclosure.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the monitoring device of Boucourt to monitor a motor vehicle compartment for the purpose of providing safety warnings/alarms to a motor vehicle operator.

Furthermore, even though Boucourt does not disclose the reference object having a high reflectivity between 0.5 and 1.0, it has been held that where the general conditions of a claim are disclosed (Boucourt discloses the reference object has reflectivity for tracking/monitoring an object, inherent with tracking of the object by vision, paragraph

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0020, lines 1-5), discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Allowable Subject Matter

Claims 25 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

The combination as claimed wherein a device for determining at least one calibration parameter of at least one image sensor comprising the at least one reference object is applied to at least one object of the scene that is relevant with respect to a monitoring function of the at least one image sensor, wherein the at least one reference object is applied to at least one of at least one air bag flap, at least one air bag, and at least one steering wheel in the passenger compartment of the motor vehicle (claims 25, 29) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

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Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael P. Nghiem/

Primary Examiner, GAU 2863

January 2, 2009